TECHNICAL INFORMATION

Measurement time: 3 - 5 seconds
Measurement methods: Axilla , Oral and Rectal
Measurement range: 35℃ to 42℃ (95℉ to 107,6℉)
Accuracy: Technical: + / - 0,1℃ (tested in calibrated water bath). Clinical: Complies with ASTM E 1112-86 standard requirements.

Required operating environment for functionality:

Temperature: 10℃ to 40℃ (50℉ to 104℉)
Air pressure: 700 to 1060 hPa
Humidity: 15 to 95% (no condensing)

Storage environment:

Temperature: -20℃ to 50℃ (-4℉ to 122℉)
Air pressure: 700 to 1060 hPa
Humidity: 15 to 95% (non condensing)

Design:

Display: LCD (18,5 mm x 21,5 mm)
Dimensions: 18,5 cm x 3,5 cm x 4,4 cm
Weight: 114 gr. (without battery)
Materials: Case – ABS plastic
Probe tip – Stainless steel 304

Other information:

Internally powered equipment: 9 V Battery
Battery life: approximately 1,000 measurements using alkaline battery
Mode of operation: continuous operation
Device is not suitable for use: In addition to flammable anesthetics, as well as with air or oxygen or mixture of nitrous oxide.
Water desity: Thermometer – IPXO
Applied part – IPX7

WARRANTY:

EM Euro Medical guarantees that this thermometer will operate as described in this manual for a period of one year from the date of purchase, when used and maintained in accordance with the instructions herein. Please submit the thermometer in case of a complaint with original invoice to authorized specialist dealer or directly to EM Euro Medical.

User manual
Penguin Instant Thermometer

You can now measure body temperature exactly in just 4 seconds, only, with the **Penguin** Instant Thermometer, whilst using the three classic measuring methods: Axillar, oral or rectal.

The Penguin Instant Thermometer is especially eligible for unproblematic and accurate measurements with babies and small children.

Penguin-Reference-Method enables faster evaluation of fever trend

The unique probe of this thermometer provides precise measuring of inner body temperature by practicing rectal measurement

Penguin Reference Method includes an oral and rectal measurement. Those should be taken in between one minute interval (for cooling down the thermometer at room temperature).

Due to these recorded two values, the effect of antipyretics can be recognized by a subsequent oral measurement. Accordingly, inferences to a rectal measurement can be anticipated. This is important because the change of temperature can be recognized faster oral than by the rectum. Due to a higher body mass around the anus, cooling-down of body will be processed slower.

Thus, Penguin-Reference-Method avoids any unnecessary additional antipyretics.

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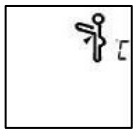
INSTRUCTIONS FOR USE:

WARNING**:** **Never use** the Penguin as an **Ear-Thermometer**. Severe injuries can be caused by insertion into the ear.

1. **Turn on the Thermometer.**
Press the **ON/OFF** button and wait until all symbols inclusive sand glass disappear on display and two signal tones resound.

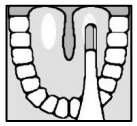
2. **The Thermometer is now ready for use.** To select the method of measurement, press the **Mode** button – the arrow changes its position and points to the selected method.



3. **Position** the thermometer in correspondence to the selected method and follow the following instructions and illustrations:

- **Axilla**
  Place thermometer´s probe in the armpit and press the arm to the body.

- **Oral**
  Place thermometer probe under the tongue and close the mouth.



- **Rectal**
  Due to hygienic requirements make use of **Penguin** Probe Covers. Lubricate thermometer probe covers with a water-soluble glide gel. Gently insert the thermometer tip not more than 1.25 cm into the rectum – we recommend lateral position for avoiding too deep penetration (differing from illustration).

4. **A long single beep** indicates the ending of measurement. The measured result appears on the display.

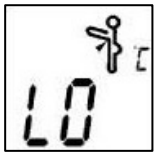
5. **To turn off the thermometer** press the **ON** / **OFF** button.

WARNING: Wait at least one minute before taking any other measurements, that the thermometer can cool down on room temperature!

WARNINGS IN CASE OF FAILURES / TROUBLESHOOTING

In case of failure or incorrect temperature measurement the following warnings will be indicated on the display:

Display indicates *LO*: Measured temperature is below 35°C and out of measuring range**.**
Instructions: Turn off thermometer by using the ON / OFF button and turn it on, again. Retake measurement as described on left page.



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Display indicates *HI*: Measured temperature is above 42 ° C.

Display indicates *Er.1*: Thermometer was inserted before symbols inclusive sand glass disappeared from display.
Instructions: Wait till “Waiting” symbol (sand glass) disappears and till resound of two ´”Beeps”.

Display indicates *Er.2*: Temperature is not registered, because of poor physical contact or wrong placement.
Instructions: Prove coincidence of chosen method of measurement. Retake measurement after a minute.

Display indicates *Er.3*: Malfunction of thermometer.
Instructions: Do not use the thermometer any longer. Contact EM Euro Medical GmbH or your authorized specialized dealer.

Display indicates *Er.4*: Temperature was not measured within 1 minute after thermometer was ready to operate.
Instructions: Prove coincidence of chosen method and practiced measurement. Turn thermometer off by using the ON / OFF Button. Restart the measurement after 1 minute.

Display indicates *Battery Symbol*: When blinking, battery loses power (around 10 measurements still possible; Battery is nearly empty, with enduring displaying of battery symbol. Instructions: Change battery.